

# Awareness of nurses on distance education in Nepal

Shahi M

National Center for Health Professions Education, Tribhuvan University, Institute of Medicine, Maharajgunj, Kathmandu, Nepal.

**Correspondence to:** Ms. Mandira Shahi, Associate Professor, National Center for Health Professions Education, TU, IOM, Maharajgunj, Kathmandu, Nepal, Tel: 977-1-4416734,

Email: mandiranp@yahoo.com

## Abstract

**Introduction:** Distance Education Technology is one of the most effective modes of imparting education and training for those who cannot afford formal education. This study aims to assess the awareness regarding distance education technology among graduate level students as an alternative approach for continuous advance level nursing education in Nepal.

**Methods:** The study has adopted descriptive cross-sectional design. The populations of this study were the graduate level nurses who were studying Bachelor of Nursing courses in three different institutes of Kathmandu valley. A non-probability convenient sampling technique was used to select the nursing institutes. A pretested semi-structured questionnaire was developed to collect data from 94 nursing students to assess their interest and desire regarding distance education. A semi-structured questionnaire was used to enquire regarding, personal biography of respondent; knowledge on distance education; use of distance education for continuous education; opinion on distance education as an effective mode of technology for continuous nursing education etc.

**Results:** Most of the respondents (81%) had heard about Distance Education Technology, but none of them had attended any academic course through distance education. Half of the respondents had some knowledge regarding distance education technology; among them (29.7 %) could figure out that it is a type of interactive study between learners and facilitators from distance/far area; 38.2% recognized as an independent study, which is often provided by recognized Open University (13.8%); which can be performed from their own home (29.7%) as a means of corresponding course (17.02 %). About (46.8%) knew that major area of instruction is via internet. Surprisingly (94.7 %) of them were interested to study advance nursing courses through distance education in Nepal and among them (40.4 %) would like to get higher degree via Distance Education Technology in Health Professions Education.

**Conclusions:** It can be inferred that majorities of graduate level nursing students are eager to upgrade their cognitive and psychomotor competencies for professional development by means of Distance Education Technology. It could be an alternative means of teaching even for those nurses who are hard to reach, and serving the mankind at the remote areas.

**Key words:** Continuous education, distance education, nurs

## Introduction

Distance education is planned learning that normally occurs in a different place from teaching. It requires special techniques of course design, special instructional techniques, and special methods of well special organizational and administrative arrangements.<sup>1</sup> The need

for distance education is also increasing worldwide. American Association of College of Nursing stated that "In USA, an estimated shortage of 5,00,000 registered nurses is expected by 2025 with 55% of surveyed nurses reporting their intention to retire between 2011 and 2020." Thus, distance education is growing trend in nursing.<sup>2</sup>

## Awareness of nurses on distance education

The concept of distance education in Nepal was initiated formally with the implementation of Radio Education Teacher Training Project (RETTTP) in 1978. The project aimed at providing training to the rural untrained teachers and used radio as the main media apart from the printed self-learning materials.<sup>3</sup>

Distance education may become popular until the middle of this century when instructional Radio and Television become more popular.<sup>4</sup> The 9<sup>th</sup> and 10<sup>th</sup> five year plan has also mentioned to establish Open University in Nepal.<sup>5</sup> Ministry of Education has emphasized policy on Open and Distance Learning (ODL) in 2063.<sup>6</sup> The power of growing use of information and Communication technologies and the resulting trend towards globalization have reduced the world into that of small village.<sup>7</sup>

Due to limited institutions and resources, it is being difficult for the emerging nurses to get higher education. Similarly, some students are interested in obtaining a degree to qualify for a better job as well as promotion. Now days, cost of education is very high so most of the nurses are unable to pay their fee for the further education. Also due to the geographical constraints, jobs and families, nurses are not able to obtain further education as education is mostly situated in the urban or central area. This study aims to assess the awareness regarding distance education technology among graduate level nursing students as an alternative approach for continuous advance level nursing education in Nepal.

## Methods

The study has adopted descriptive cross-sectional design. The study was conducted from 15<sup>th</sup> March, 2009 to 17<sup>th</sup> March, 2009. The population of this study was the graduate level nurses who were studying 1<sup>st</sup> year Bachelor of Nursing courses in three different institutes of Kathmandu valley: (1) Nursing Campus (NC), Maharajgunj, (2) Asian College for Advance Studies (ACAS), Satdobato, Lalitpur, and (3) Stupa Health Care Center Co-operative Limited (SHCCCL), Baudha. Non-probability convenient sampling technique was used to select the nursing institutes. All together there were 124 BN 1<sup>st</sup> year students from three campuses but the only 94 students were participated in the study whereas 30 students did not return the form. Data were collected through self-report method by providing a prepared semi-structured questionnaire for individual respondent. The information includes:

- Personal biography of respondent
- Knowledge on distance education
- Use of distance education for continuous education

- Opinion on distance education as an effective mode of technology for continuous nursing education

In order to maintain content validity, the respective questionnaire was prepared by reviewing related literature, and researcher's personal experience. A pilot study had been carried out on the 10% of the total sample in the similar setting, to see the reliability of the prepared instruments for the final data collection.

The investigator formally requested and obtained officially written permission to carry out the study from the three nursing campuses. Verbal consents were taken from all the students. None of the students were forced to participate and ethics was taken into consideration. The investigator briefed about the objectives of the study, followed by half hour duration of time to fill up the questionnaire.

The collected data were entered into SPSS version 11.5. Descriptive statistics were calculated.

## Results

Majority (56.3%) of respondent were found to 21-25 years. In this study, respondents were from five regions with majority (51%) belonging to Central Development Region followed by (18%) from Western Development Region; however, (7.4%) of the respondents didn't response about their permanent address (Table 1). Majority (46.8%) of the respondents were unmarried out of total 24. Similarly, Majority of the (89.3%) respondents were from hospital background followed by (8.5%) NGO/INGO background. Likewise, there is high variability on durations of work experiences. Majority (74.4 %) of the respondents had total duration of work experience between 2 to 6 years. Similarly, most of the respondents (81%) had heard about the Distance Education.

**Table 1:** Personal biography of respondents

| (n=94)                                |        |         |
|---------------------------------------|--------|---------|
| Demographic Characteristics           | Number | Percent |
| <b>Age of the respondents (years)</b> |        |         |
| 21-25                                 | 53     | 56.3    |
| 26-30                                 | 17     | 18      |
| 31-35                                 | 8      | 8.5     |
| 36-40                                 | 4      | 4.2     |
| Above 41                              | 4      | 4.2     |
| NR (No Response)                      | 8      | 8.5     |
| <b>Permanent Address</b>              |        |         |
| Far Western Development Region        | 5      | 5.3     |
| Mid Western Development Region        | 13     | 13.8    |
| Western Development Region            | 17     | 18      |

|                                            |    |      |
|--------------------------------------------|----|------|
| Central Development Region                 | 48 | 51   |
| Eastern Development Region                 | 4  | 4.2  |
| NR (No Response)                           | 7  | 7.4  |
| <b>Marital Status</b>                      |    |      |
| Married                                    | 44 | 46.8 |
| Unmarried                                  | 50 | 53.2 |
| <b>Name of Organization/Institution*</b>   |    |      |
| Hospital                                   | 84 | 89.3 |
| Non-governmental organization/INGO         | 8  | 8.5  |
| Nursing Home                               | 4  | 4.2  |
| Campus/College                             | 4  | 4.2  |
| Primary Health Care Center                 | 3  | 3.1  |
| Others                                     | 2  | 2.1  |
| <b>Duration of work experience in year</b> |    |      |
| 2-6 years                                  | 70 | 74.4 |
| 7-12 years                                 | 11 | 11.7 |
| 13-18 years                                | 9  | 9.5  |
| 19-24 years                                | 3  | 3.1  |
| NR (No Response)                           | 1  | 1.1  |
| * Multiple Responses                       |    |      |

Majority 80.9% of the respondents had heard about the distance education (DE) (Table 2). Likewise, majority 38.2% respondents opinioned that DE means Independent Study; 29.7% as interaction between students and teachers from far and study from own home; 17.02% as correspondence educational course and 13.8% as Open University. Similarly, majority 29.7 % of the respondents were familiar about Distance Education through friends. Likewise, Majority 43.6 % of the respondents were familiar about it between 1-24 months. There were 46.8% respondents who used internet as a media of instruction followed by 15.9% using radio is a media of instruction. Most of the respondents (61.7%) were unaware about the types of educational training courses which are available in DE. Most (65.9 % of sample) agreed that it saves time but is sometimes difficult to understand (59.5 %).

**Table 2:** Knowledge on distance education

(n=94)

| Knowledge regarding to DE                          | Number | Percent |
|----------------------------------------------------|--------|---------|
| <b>Heard about distance education</b>              |        |         |
| Yes                                                | 76     | 81      |
| No                                                 | 18     | 19      |
| <b>Knowledge regarding to distance education*</b>  |        |         |
| Independent study                                  | 36     | 38.2    |
| Interaction between students and teachers from far | 28     | 29.7    |
| Study from own home                                | 28     | 29.7    |

|                                                                        |    |       |
|------------------------------------------------------------------------|----|-------|
| Correspondence educational course                                      | 16 | 17.02 |
| Open University study                                                  | 13 | 13.8  |
| Others                                                                 | 2  | 2.1   |
| <b>Sources of information about DE</b>                                 |    |       |
| Friends                                                                | 28 | 29.7  |
| Television                                                             | 20 | 21.2  |
| Radio                                                                  | 19 | 20.2  |
| Internet                                                               | 11 | 11.70 |
| Newspapers/magazines                                                   | 7  | 7.4   |
| Others                                                                 | 9  | 9.5   |
| <b>Time period being familiar about DE (in months)</b>                 |    |       |
| 1-24                                                                   | 41 | 43.6  |
| 25-48                                                                  | 3  | 3.1   |
| 49-72                                                                  | 6  | 6.3   |
| 73-96                                                                  |    | 1     |
| 1.06                                                                   |    |       |
| 97 and above                                                           | 2  | 2.1   |
| No Response                                                            | 41 | 43.6  |
| Total                                                                  | 94 | 100.0 |
| <b>Media of instruction in DE</b>                                      |    |       |
| Internet                                                               | 44 | 46.8  |
| Radio                                                                  | 15 | 15.9  |
| Television                                                             | 12 | 12.7  |
| Printed materials                                                      | 5  | 5.3   |
| Others                                                                 | 18 | 19.1  |
| <b>Knowledge on type of education training courses available in DE</b> |    |       |
| Yes                                                                    | 33 | 35.1  |
| No                                                                     | 58 | 61.7  |
| No Response                                                            | 3  | 3.2   |
| <b>Types of educational training courses available in DE*</b>          |    |       |
| Degree Certifying Course                                               | 55 | 58.5  |
| Refresher Training Course                                              | 26 | 27.6  |
| Others                                                                 | 16 | 17.02 |
| <b>Advantages of distance education*</b>                               |    |       |
| Time save                                                              | 62 | 65.9  |
| Low cost                                                               |    | 47 50 |
| Critical thinking                                                      | 32 | 34.04 |
| No need to separate with family                                        | 53 | 56.3  |
| Others                                                                 | 4  | 4.2   |
| <b>Disadvantages of distance education*</b>                            |    |       |
| Sometime difficult to understand                                       | 56 | 59.5  |
| No opportunity for group discussion                                    | 54 | 57.4  |
| Sometime technology difficulty                                         | 51 | 54.2  |
| Others                                                                 | 2  | 2.1   |
| * Multiple Responses                                                   |    |       |

## Awareness of nurses on distance education

All respondents answered that they did not take any educational course through DE though they need to keep up to date knowledge, skills and attitude (73.4 %). Majority 78.7% of the respondents recommended that DE is an effective technology for CE in Nursing in context of Nepal. Most of the respondents (94.7%) are interested to study through DE in Nepal and amongst them most (64.8 %) are interested to study Master Degree Course. Likewise, 40.4% are interested to study health professions education, 32.9 % are interested to study hospital related courses, and 28.7 % are interested to study Community Health. Similarly, majority 32.9% respondents gave opinion that DE is an advance education of this century or era to get new knowledge, skills and attitude.

**Table 3:** Opinions on distance education as an effective mode of technology for continuous nursing education

(n=94)

| Variables                                                                                              | Number | Percent |
|--------------------------------------------------------------------------------------------------------|--------|---------|
| <b>Reasons for continuous education*</b>                                                               |        |         |
| To keep up to date knowledge, skills and attitude                                                      | 69     | 73.4    |
| To face different new opportunities and challenges                                                     | 62     | 65.9    |
| To adjust in the new method                                                                            | 37     | 39.3    |
| To perform specific tasks in the job                                                                   | 31     | 32.9    |
| Others                                                                                                 | 6      | 6.3     |
| <b>Response regarding opinion on DE as an effective technology for continuous education in nursing</b> |        |         |
| No                                                                                                     | 7      | 7.4     |
| No Response                                                                                            | 13     | 13.8    |
| Yes                                                                                                    | 74     | 78.7    |
| Total                                                                                                  | 94     | 100.0   |
| <b>Reasons regarding DE as an effective technology for continuous education in nursing</b>             |        |         |
| Didn't Gave Reason                                                                                     | 36     | 38.3    |
| Gave Reason                                                                                            | 58     | 61.7    |
| Total                                                                                                  | 94     | 100.0   |
| <b>Response regarding interest to study through DE in Nepal</b>                                        |        |         |
| No                                                                                                     | 1      | 1.1     |
| No Response                                                                                            | 4      | 4.3     |
| Yes                                                                                                    | 89     | 94.7    |
| Total                                                                                                  | 94     | 100.0   |
| <b>Level of education*</b>                                                                             |        |         |
| Master degree                                                                                          | 61     | 64.8    |
| PhD                                                                                                    | 24     | 25.5    |
| Bachelor                                                                                               | 18     | 19.1    |
| Certificate                                                                                            | 3      | 3.1     |
| Others                                                                                                 | 1      | 1.06    |

|                                                                                                                                           |    |      |
|-------------------------------------------------------------------------------------------------------------------------------------------|----|------|
| <b>Types of specialization*</b>                                                                                                           |    |      |
| Health professions education                                                                                                              | 38 | 40.4 |
| Hospital                                                                                                                                  | 31 | 32.9 |
| Community Health                                                                                                                          | 27 | 28.7 |
| Others                                                                                                                                    | 3  | 3.1  |
| <b>Opinions about distance education*</b>                                                                                                 |    |      |
| DE is an advance education of this century or era to get new knowledge, skills and attitude.                                              | 31 | 32.9 |
| Should be started in different level and subject in nursing.                                                                              | 11 | 11.7 |
| DE if brought into practice in Nepali education system, it will be definitely proved to be very effective because of its many advantages. | 44 | 46.8 |
| For the continuous education.                                                                                                             | 23 | 24.4 |
| DE should be reached in rural areas.                                                                                                      | 9  | 9.5  |
| * Multiple Responses                                                                                                                      |    |      |

## Discussion

Most ( 56.3%) of the respondents were found to be between 21-25 years in the study which is similar to the study of Aslanian.<sup>8</sup> Most of the respondents opinioned that continue nursing education is to enhance knowledge, skills and attitude. Continuous education plays a critical role in enhancing and updating the knowledge skills and attitude of health professionals and continues education is mandatory for license renewal to improve the quality of patient care. Thus continue education is very essential for nurses.<sup>9</sup> similarly, nurses need to be trained and their knowledge and skills constantly updated to keep pace with the demand of the country.<sup>10</sup>

As most of the respondents belonged to Central Development Region of Nepal, they represented the urban community. In this context, to provide continuing education of health professionals in rural settings, development in information and communications technologies offers a potential to move the clinical training of health professionals away from the resource intensive urban academic health center to poor rural areas.<sup>11, 12</sup>

Likewise most of the respondents wanted to save time and financial expenses through DE, some of them wanted DE so that they could stay with their. According to Wambach et al, the changing health care system and increasing demands for primary care providers have prompted an increase in nurse practitioner programs in the United States. Nurses in rural areas that are underserved by primary care practitioners are often faced with time and distance barriers

in returning to school for advance education. To reduce time and distance barrier and foster continued residence in high need areas, school of nursing are turning increasingly to distance learning methods.<sup>13</sup> Carr also found similar result of cost saving in distance learning programs.<sup>14</sup>

Similarly, most of the respondents (29.7%) flashed the answer on the meaning of DE which they mean it is an interaction between students and teachers from far which is also supported by Reinert & Fryback. According to them, trend toward off-campus classes has significant implications for nursing education, there is little research about the current use of distance learning by schools of nursing and they also linked that choice of an educational approach for developing countries should not only be affordability, but also affordable effective education by providing sufficient opportunity for contact with fellow students and lecturers to ensure development of critical thinking and reflective skills through interaction between students and teachers from far.<sup>15</sup> Also most of the respondents (38.2%) answered to the question of meaning of DE where they indicated an independent study which is also supported by Heimstra and he also stated DE is a life long learning.<sup>16</sup>

Finally, 13.8% respondent answered the need of an Open University regarding to question of need of Open University for DE. UNESCO also emphasizes to start or enhance Open University especially in developing countries.<sup>17</sup>

Two respondents opinioned that with busy modern lifestyle, DE is the most need of our life for the further education, which helps to identify and face different challenges. Similarly, eight respondents conceived DE to be more effective due to the many advantages behind it if brought into practice in Nepali education system and students and teachers will get more opportunity to use the free time in other productive works. Fifteen respondents explored that, DE is effective, advance method of training and education in which we do not need to go to college daily and routinely. They can start their learning in the sanctuary of their home and at their convenience. This education further educates people without interrupting their life style. Considering its importance scholars, Moore and Thompson also supported its development. Most researchs and scholars from the 1980s and 1990s concluded that distance education was to be considered as an effective measure by the achievement of learning.<sup>18</sup> Similarly, there was better competency of students taught by distance education versus traditional classroom methods.<sup>19</sup>

Likewise most of the respondents 46.8% said internet is used as a media of instruction which is also supported by Kinley. Highlighting on DE, he insists that today's distance

education focuses on dramatic shifting towards network-based technologies and internet-based delivery system. Today the internet instruction is the most popular and fastest growing medium in the United States.<sup>20,21</sup>

Majority (38.2%) of the respondents answered 'independent study for knowledge' regarding DE which is the basis for situated cognition and problem based learning. According to Streibel and Savery, DE is an alternative approach which is based on constructivist principle in which a learner actively constructs an internet representation of knowledge by with the material to be learned.<sup>22, 23</sup> The researchers believe that this study will provide baseline information for future researchers in the field of 'Distance Learning'. It will also be helpful for policy makers and administrators for formulating policy to launch various basic and post distant nursing educations in different levels.

## Conclusions

Almost all respondents wanted to start distance education in nursing in Nepal as soon as possible to enhance knowledge, skills and attitude according to keep up with recent advances. Most of the respondents were interested in academic courses in health professions education and hospital and community health. Most of the respondents were interested to join Master degree followed by PhD.

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## Awareness of nurses on distance education

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